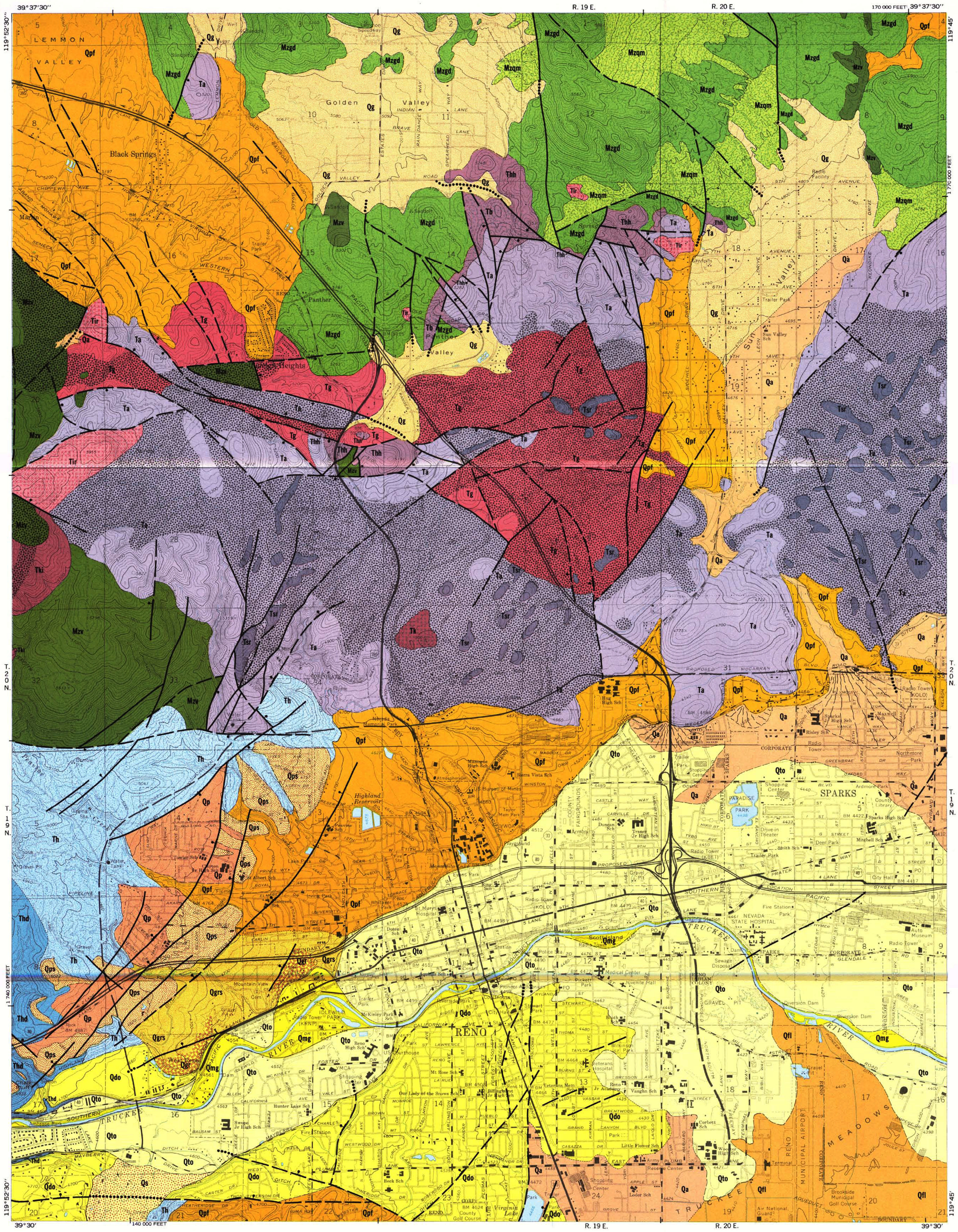
NEVADA BUREAU OF MINES AND GEOLOGY
ENVIRONMENTAL SERIES ✧ RENO AREA

RENO FOLIO
GEOLOGIC MAP

ENVIRONMENTAL SERIES ✧ RENO AREA

RENO FOLIO GEOLOGIC MAP



QUATERNARY

Qmg **Mainstream Gravel** Sandy cobble gravel confined to the present Truckee River floodplain.

Qfl **Floodplain and Lake Deposits** Thin sheet of medium- to thin-bedded clayey silt and sand. Contains discontinuous layers of silt and peat.

Qp **Pediment Deposits** Thin sheets of gravelly silt and silty clay. Weakly weathered.

Qto/Qs **Tahoe Outwash Qto:** Boulder to cobble gravel, sandy gravel, and gravely sand. Contains giant boulders. Rock clasts are rounded to subrounded and, in decreasing order of abundance, are granitic, volcanic, and metamorphic. **Qs:** Sidestream deposits.

Qdo **Donner Lake Outwash** Deposits similar to Tahoe outwash except weathered to depths of four feet or more.

Qps **Pediment and Stream Gravel** Thin deposits of sandy to clayey, cobble to small boulder gravel. Moderately to deeply weathered. Chalk Bluff area-contains numerous large, rounded to highly rounded cobbles and boulders of basalt and granitic rock. Peavine Creek area-contains many locally derived white to yellowish white, silicified andesite fragments.

Qgr/Qgrs **Gravel of Reno Qgr:** Moderately well-sorted sandy cobble gravel. Slightly cemented. **Qgrs:** Weakly-bedded deposits of coarse sand containing scattered small cobbles and thin cobble layers.

Qa **Alluvium** Poorly sorted clayey to silty gravelly sand, poorly bedded to unbedded.

Qg **GraniticAlluvium** Weathered granitic sand.

Qpf **Alluvial Fan Deposits of Peavine Mountain** Poorly sorted, pale yellowish to reddish brown, montmorillonitic, gravelly to sandy and clayey silt. White silicified andesite fragments common. Black Springs area—pale orange brown clayey and gravelly sand.

UNCONFORMITY

TERTIARY

Th/Thd **Sandstone of Hunter Creek Th:** Pale brown to gray brown and greenish gray, prominently bedded, interlayered siltstone, silty sandstone, and sandy conglomerate. **Thd:** White to yellowish white diatomite and diatomaceous sandstone.

Tk/Tki **Kate Peak Formation Tk:** Gray, porphyritic, hornblende-biotite andesite flow containing phenocrysts of plagioclase, biotite, and hornblende. **Tki:** Intrusive rock lithologically similar to the flow.

Tir **Rhyolite Plugs** Flow-banded, light gray porphyritic rhyolite. Small quartz and feldspar phenocrysts in a fine-grained matrix.

Tsr **Silicified Rock** Silicified rock and breccia consisting almost entirely of fine-grained red-brown quartz, colored by iron-oxide. This unit is confined to areas of altered volcanic or granitic rocks.

Tg **Granitic Stock** Hypabyssal stock composed of several intrusive phases ranging in composition from pyroxene diorite through granodiorite porphyry to pyroxene syenite. Largely altered to cream-colored iron-stained rock made up of quartz, sericite, and clay. Locally contains chlorite, epidote and potassium feldspar. Pyrite is abundant in unweathered parts of the altered rock.

Ta **Alta Formation** Dark brown pyroxene andesite flows, flow breccia, and laharic breccia. Commonly altered to tan rock composed of quartz, sericite, and clay minerals or propylitized to gray green rock containing chlorite, calcite, albite, epidote, and clay minerals.

Tb **Epiclastic Volcanic Breccia** Greenish white volcanic breccia composed predominently of lithic fragments derived from the erosion of rhyolitic flows and ash-flow tuff. In many areas the fragments are altered to quartz, sericite, and clay minerals.

Thh **Hartford Hill Formation** Crystal-poor cream to buff rhyolitic ash-flow tuff with sparse crystals of quartz and feldspar in a moderately welded matrix of pumice and ash.

UNCONFORMITY

MESOZOIC

Mzqm **Quartz Monzonite** Coarse-grained, light gray plutonic rock composed of microcline, quartz, plagioclase, and moderately abundant biotite. Deeply weathered and does not normally cropout.

Mzgd **Granodiorite** Gray hornblende-biotite granodiorite. Deuteric alteration has commonly formed actinolite and chlorite from hornblende and biotite; epidote, calcite, and sericite partially replace plagioclase. Not normally deeply weathered and usually forms numerous outcrops.

Mzv **Peavine Sequence** Gray to gray-green metavolcanic rocks with subordinate amounts of metamorphosed epiclastic volcanic sedimentary rocks. The metavolcanic rocks include rhyolite flows and pyroclastics and dacite to andesite flows and laharic breccias. Where fresh, highly resistant to erosion and tends to form bold outcrops.

Contact Long dashes where approximately located; short dashes where indefinite; dotted where buried.

Fault Dashed where approximately located; dotted where concealed. Ball on downthown side.

Alluvial Fan

Altered Rock

This map illustrates the distribution of bedrock and surficial deposits in the Reno Quadrangle. The geologic mapping was done as a reconnaissance, thus the user should regard this map as preliminary.

By H. F. Bonham Jr. and E. C. Bingler, 1973

Quaternary geology in part from Birkeland, P. W., Correlation of Quaternary Stratigraphy of the Sierra Nevada with that of the Lake Lahontan Area in *Means of Correlation of Quaternary Successions,* Univ. of Utah, 1968.

1 INCH EQUALS 2000 FEET

0 0.5 1 MILE
0 2000 4000 FEET
0 0.5 1 KILOMETER
0 1000 METERS

CONTOUR INTERVAL 20 FEET
DOTTED LINES ARE 10-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

Topographic base from U.S. Geological Survey Reno 7½′ quadrangle, 1967.

Cartography by Susan L. Nichols.

NEVADA BUREAU OF MINES AND GEOLOGY
UNIVERSITY OF NEVADA
RENO, NEVADA 89507